Air Force Flight Test Center

U.S. AIR FORCE

IT REENGINEERING

Name: Lee Gardner

Org/Office: AFFTC/ITXP

Phone #: 661-810-8087

email: lee.gardner@edwards.af.mil

Integrity - Service - Excellence

Overview

AFFTC IT

History

Why IT?

What did we do right?

What would we do differently?

Challenges

Innovations

Summary

- **History**
- **Why IT?**
- **What did we do right?**
- **What would we do differently?**
- **Challenges**
- **Innovations**
- **Summary**

History

AFFTC IT

- History
- Why IT?
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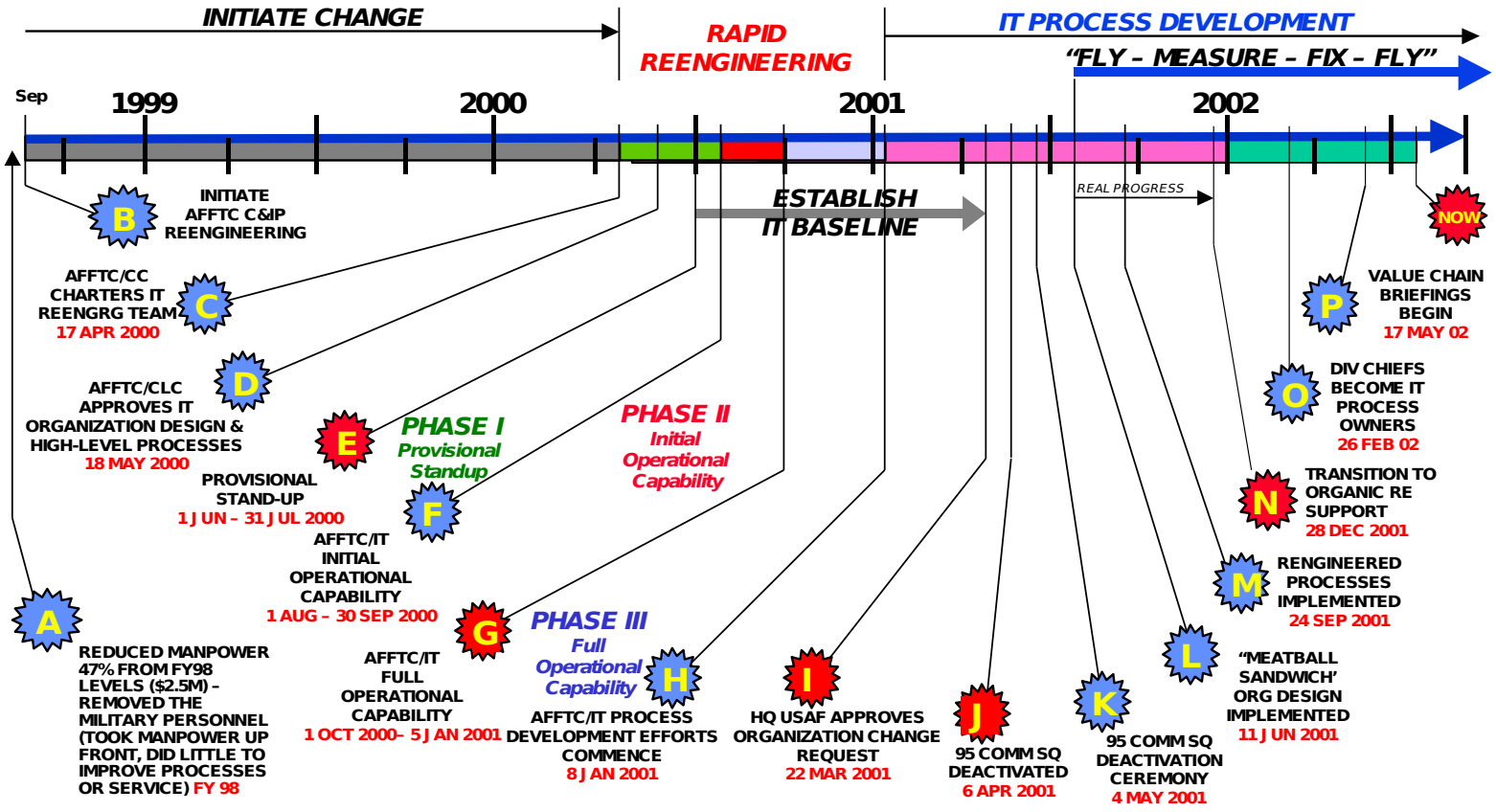
Information Technology Directorate

Transformation Journey – Where We've Been


INITIATE CHANGE
RAPID REENGINEERING
IT PROCESS DEVELOPMENT
"FLY – MEASURE – FIX – FLY"
Sep
1999
2000
2001
2002
REAL PROGRESS
NOW
ESTABLISH IT BASELINE
B
INITIATE AFFTC C&IP REENGINEERING
C
AFFTC/CC CHARTERS IT REENGRG TEAM 17 APR 2000
D
AFFTC/CLC APPROVES IT ORGANIZATION DESIGN & HIGH-LEVEL PROCESSES 18 MAY 2000
E
PROVISIONAL STAND-UP 1 JUN – 31 JUL 2000
PHASE I
Provisional Standup
F
AFFTC/IT INITIAL OPERATIONAL CAPABILITY 1 AUG – 30 SEP 2000
PHASE II
Initial Operational Capability
A
REDUCED MANPOWER 47% FROM FY98 LEVELS ($2.5M) – REMOVED THE MILITARY PERSONNEL (TOOK MANPOWER UP FRONT, DID LITTLE TO IMPROVE PROCESSES OR SERVICE) FY 98
G
AFFTC/IT FULL OPERATIONAL CAPABILITY 1 OCT 2000– 5 JAN 2001
PHASE III
Full Operational Capability
H
AFFTC/IT PROCESS DEVELOPMENT EFFORTS COMMENCE 8 JAN 2001
I
HQ USAF APPROVES ORGANIZATION CHANGE REQUEST 22 MAR 2001
J
95 COMM SQ DEACTIVATED 6 APR 2001
K
95 COMM SQ DEACTIVATION CEREMONY 4 MAY 2001
L
"MEATBALL SANDWICH" ORG DESIGN IMPLEMENTED 11 JUN 2001
M
RENGINEERED PROCESSES IMPLEMENTED 24 SEP 2001
N
TRANSITION TO ORGANIC RE SUPPORT 28 DEC 2001
O
DIV CHIEFS BECOME IT PROCESS OWNERS 26 FEB 02
P
VALUE CHAIN BRIEFINGS BEGIN 17 MAY 02

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WHY IT?

Why IT?

AFFTC IT

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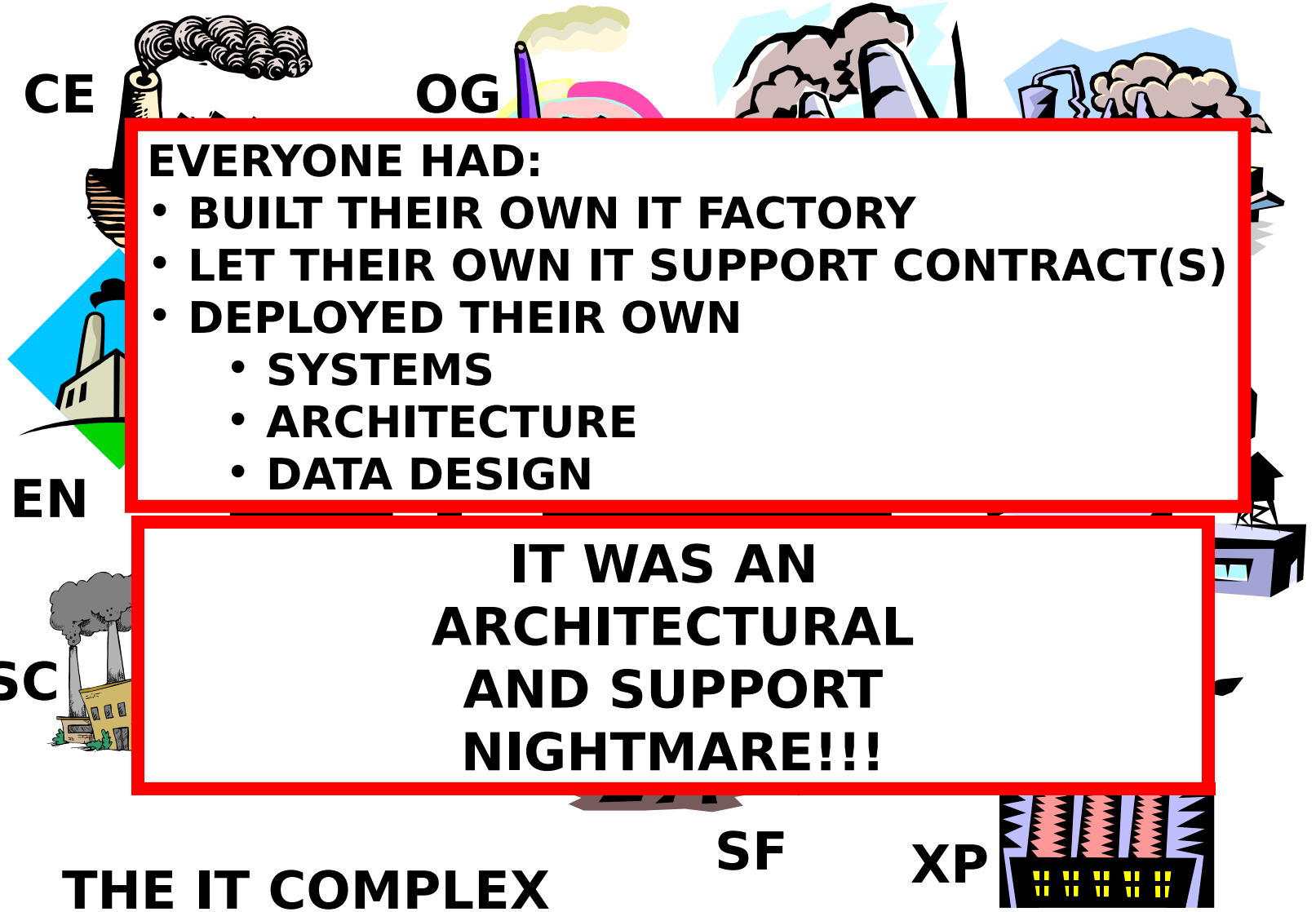

EVERYONE HAD:

- **BUILT THEIR OWN IT FACTORY**
- **LET THEIR OWN IT SUPPORT CONTRACT(S)**
- **DEPLOYED THEIR OWN**
  - **SYSTEMS**
  - **ARCHITECTURE**
  - **DATA DESIGN**

IT WAS AN ARCHITECTURAL AND SUPPORT NIGHTMARE!!!

Why IT?

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- AND …
  - NO ONE HAD THE IT “BIG PICTURE”
  - IT COSTS WERE “HIDDEN” IN OTHER BUDGETS
  - NO ONE HAD OVERALL IT AUTHORITY & RESPONSIBILITY

AFFTC's "Why IT?"

History
Why IT?
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Summary

- Create "One" AFFTC IT
  - Establish responsibility & accountability
    - Who does what?
    - How much does IT cost?
  - Focus on the local T&E customer
  - Complete the IT "Value Chain"

- Proposed Competitive Sourcing & Privatization Study (A-76) in '05
  - To prepare, we must literally, get our IT together!
  - Quantify the work!

What did we do right?

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- Chose effective tools
  - CASEwise
  - LiveLink
- Built/Learned an effective, efficient RE process
  - SAIC started us off on the right foot
  - Manganelli & Klein
- Leaders gave vision, energy, commitment

What did we do right?

History

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Summary

- We established an environment for innovation
  - From standup of initial RE team
  - Overcame initial resistance

- We were disciplined
  - Followed our process
  - Consistent in documenting our efforts, processes
  - Didn't sacrifice process when times got tough

What did we do right?

AFFTC IT

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Summary

- Established effective communications
  - What Is Going On in IT – wigoIT
  - Frequent Director's Calls

- Established regular cultural assessments
  - Completes the feedback loop to leadership
    - Anonymous, clear, honest feedback
    - Repeatable results
    - Helps measure cultural change

What did we do right?

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Summary

- Consolidated Help Desk Service
  - Met significant budget cuts aggressiv
- Established IT Operations Center
  - State-of-the-Art Nerve Center
  - On-line processes allow First Term Airman to function like Pros
- Transformed
  - From IT complex, with many IT ‘Factories’
  - To IT Enterprise with one, unified perspective
    - New building
      - »Brings Developers & Operators together
    - New Campus
      - »Fosters team spirit & Espirt d’Corps

What would we do differently?

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- Engage the entire management chain
  - Establish good communications
  - Build trust & respect
  - Enroll the workforce
- Use contractors to learn the process & skills, then use an appropriately sized organic staff
- Start leaders off owning the transformation process
  - Make them accountable for outcomes
  - Make no compromises that shift process ownership
  - Establish responsibility & accountability early

What would we do differently?

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- Properly resource the RE effort
  - Staffing
  - Training
- Build up momentum, don't change direction
- Increase communications
  - Internal & external
  - Early, often
- Maintain leadership continuity

Challenges

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- Stop “fire-fighting”
  - Resist AFFTC’s culture of heroes & champions
    - Become process-centered
    - Document our processes
    - Establish metrics for workload, quality
    - Resist keeping knowledge in people’s heads
      - Write it down
      - Make it measurable
      - Manage it
    - Reward planning and execution
  - Discover/invent steps, actions, initiatives to transform this culture

Challenges

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- Mitigate conflicts
  - Conceptual
    - Functional mindset
    - IT is an executing – not staff -- function
    - Fundamental change at every level
  - Resource
    - Taking RE effort “out-of-hide”
    - Priority: short-term or long-term?
  - Emotional
    - Change at all levels
    - Uncertainty, status, career concerns
    - Constant change in some areas, needs to stabilize

Innovations

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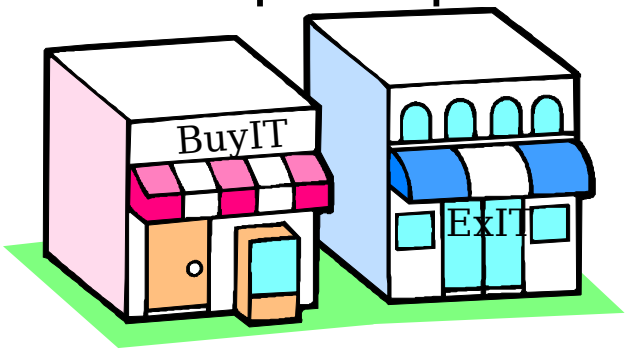
- Tools for capturing & sharing knowledge
  - Livelink knowledge base
  - CASEwise-LiveLink integration
- Process Development Templates/Tools
  - Process Development Plan and Schedule
  - Process and General Meeting Plan and Schedule
  - Process Development Team Charter
- Synergistic new one-stop-shops
  - ITRs
  - BuyIT
  - ExIT



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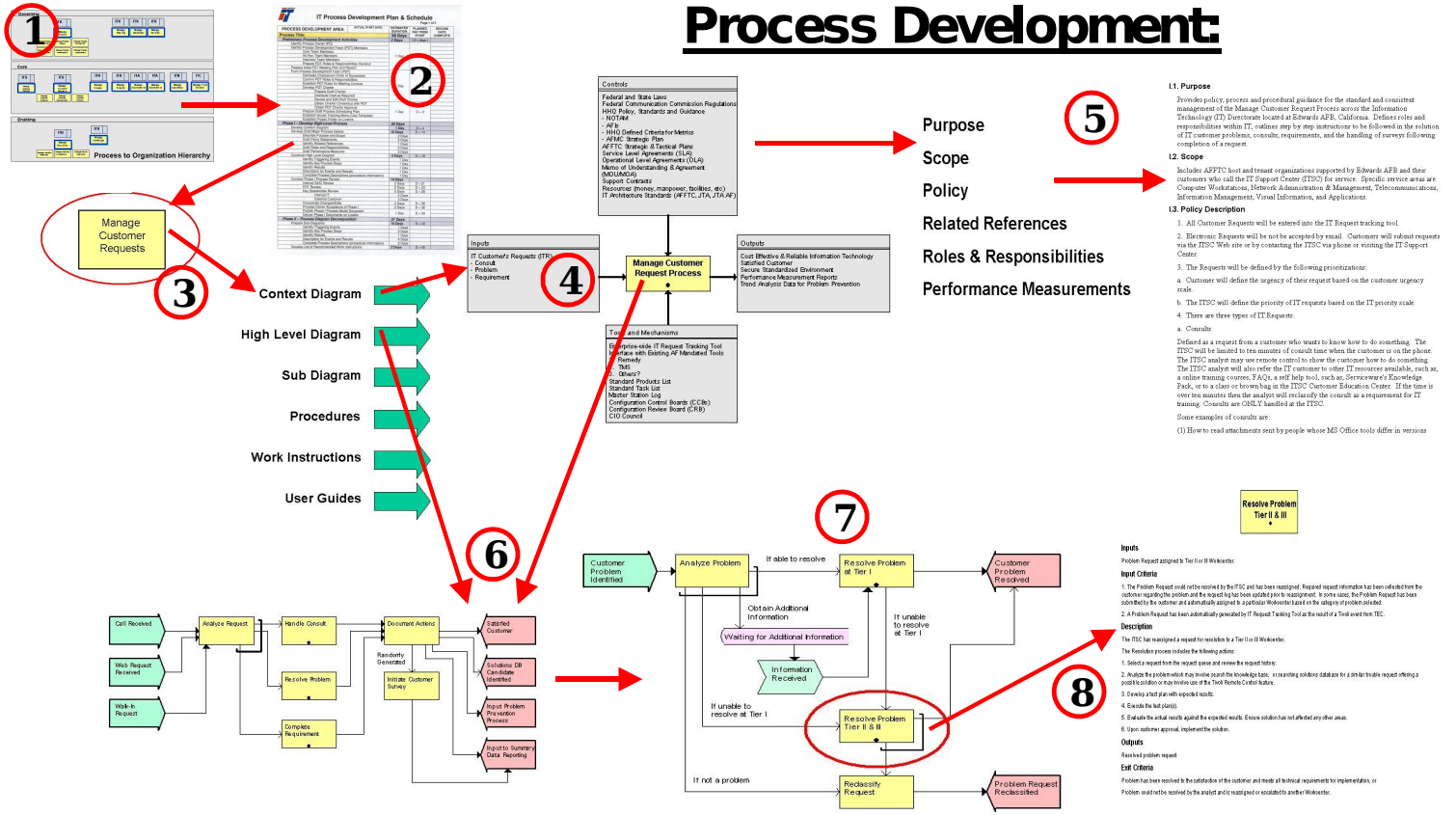
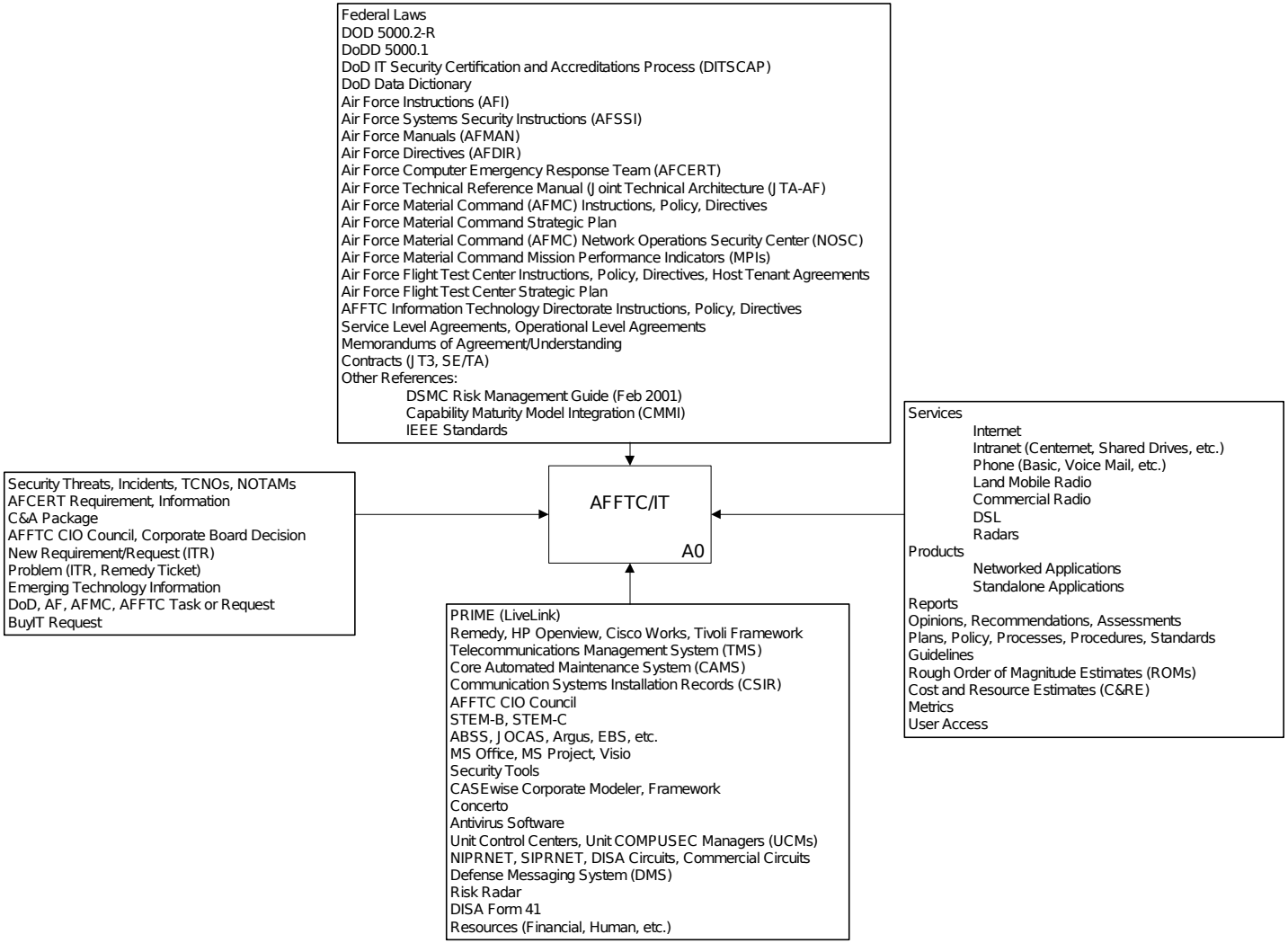
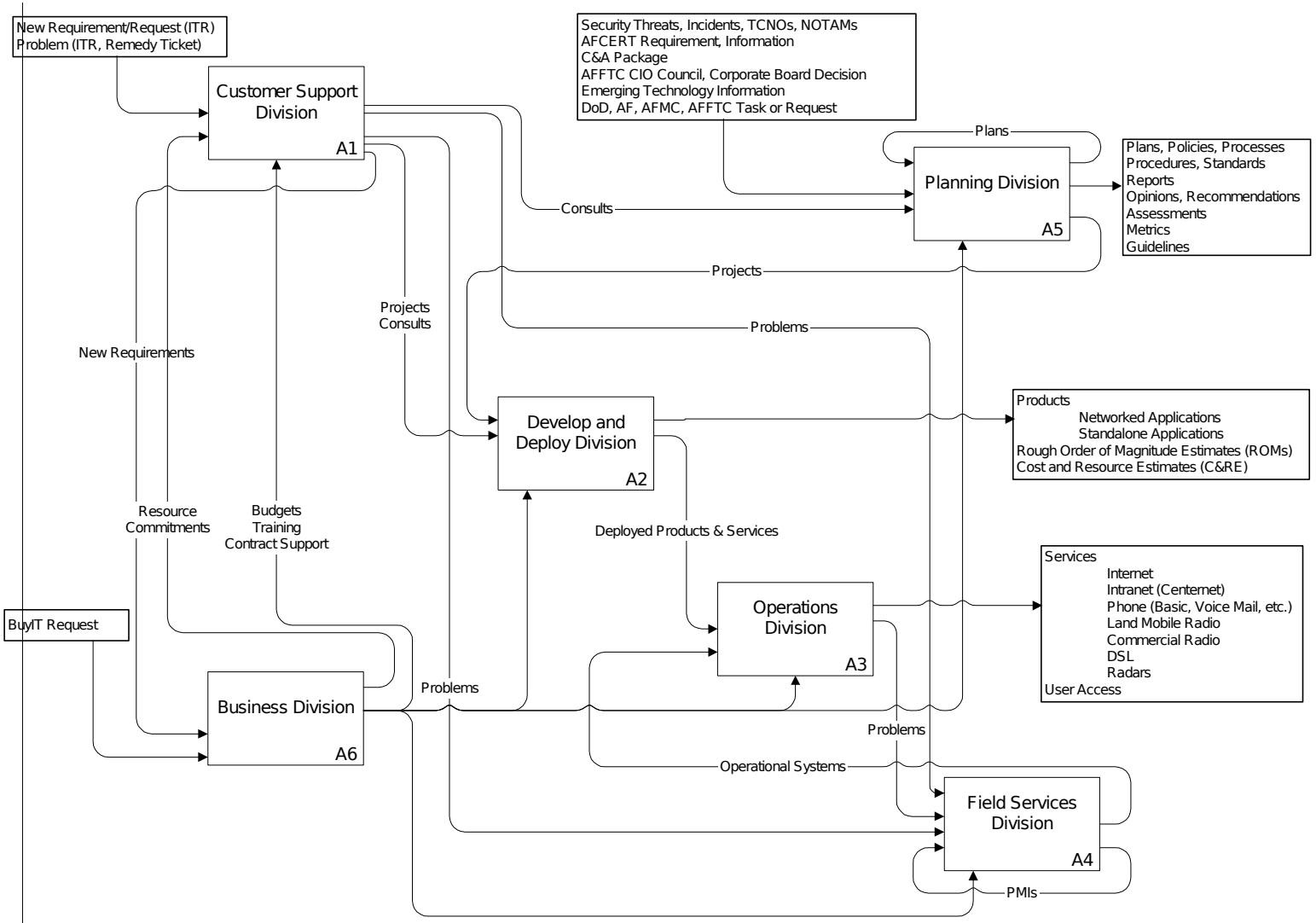
Information Technology Directorate

Process Development:


1
Process to Organization Hierarchy
2
IT Process Development Plan & Schedule
3
Manage Customer Requests
Context Diagram
High Level Diagram
Sub Diagram
Procedures
Work Instructions
User Guides
4
Controls
Federal and State Laws
Federal Communication Commission Regulations
HHQ Policy, Standards and Guidance
- NOTAM
- AFIs
- HHQ Defined Criteria for Metrics
- AFMC Strategic Plan
AFFTC Strategic & Tactical Plans
Service Level Agreements (SLA)
Operational Level Agreements (OLA)
Memo of Understanding & Agreement (MOU/MOA)
Support Contracts
Resources (money, manpower, facilities, etc)
IT Architecture Standards (AFFTC_ITA, ITA-AF)
Inputs
IT Customer's Requests (ITR)
- Consult
- Problem
- Requirement
Manage Customer Request Process
Outputs
Cost Effective & Reliable Information Technology
Satisfied Customer
Secure, Standardized Environment
Performance Measurement Reports
Trend Analysis Data for Problem Prevention
Tools and Mechanisms
Enterprise-wide IT Request Tracking Tool
Interface with Existing AF Mandated Tools
- Remedy
- TMS
- Others?
Standard Products List
Standard Tasks List
Master Station Log
Configuration Control Boards (CCBs)
Configuration Review Board (CRB)
CIO Council
5
Purpose
Scope
Policy
Related References
Roles & Responsibilities
Performance Measurements
I.1. Purpose
Provides policy, process and procedural guidance for the standard and consistent management of the Manage Customer Request Process across the Information Technology (IT) Directorate located at Edwards AFB, California. Defines roles and responsibilities within IT, outlines step-by step instructions to be followed in the solution of IT customer problems, consults, requirements, and the handling of surveys following completion of a request.
I2. Scope
Includes AFFTC host and tenant organizations supported by Edwards AFB and their customers who call the IT Support Center (ITSC) for service. Specific service areas are Computer Workstations, Network Administration & Management, Telecommunications, Information Management, Visual Information, and Applications.
I3. Policy Description
1. All Customer Requests will be entered into the IT Request tracking tool.
2. Electronic Requests will be not be accepted by email. Customers will submit requests via the ITSC Web site or by contacting the ITSC via phone or visiting the IT Support Center.
3. The Requests will be defined by the following prioritization:
a. Customer will define the urgency of their request based on the customer urgency scale.
b. The ITSC will define the priority of IT requests based on the IT priority scale.
4. There are three types of IT Requests:
a. Consults
Defined as a request from a customer who wants to know how to do something. The ITSC will be limited to ten minutes of consult time when the customer is on the phone. The ITSC analyst may use remote control to show the customer how to do something. The ITSC analyst will also refer the IT customer to other IT resources available, such as, a online training courses, FAQs, a self help tool, such as, Serviceware's Knowledge Pack, or to a class or browse bag in the ITSC Customer Education Center. If the time is over ten minutes then the analyst will reclassify the consult as a requirement for IT training. Consults are ONLY handled at the ITSC.
Some examples of consults are:
(1) How to read attachments sent by people whose MS Office tools differ in versions
6
Call Received
Web Request Received
Walk-In Request
Analyze Request
Handle Consult
Resolve Problem
Complete Requirement
Document Actions
Randomly Generated
Institute Customer Survey
Satisfied Customer
Solutions/ DB Candidate Identified
Input Problem Prevention Process
Input to Summary Data Reporting
7
Customer Problem Identified
Analyze Problem
If able to resolve
Resolve Problem at Tier I
Customer Problem Resolved
Obtain Additional Information
Waiting for Additional Information
Information Received
If unable to resolve at Tier I
If unable to resolve at Tier I
Resolve Problem Tier II & III
If not a problem
Reclassify Request
Problem Request Reclassified
8
Resolve Problem Tier II & III
Inputs
Problem Request assigned to Tier II or III Workcenter.
Input Criteria
1. The Problem Request could not be resolved by the ITSC and has been reassigned. Required request information has been collected from the customer regarding the problem and the request log has been updated prior to reassignment. In some cases, the Problem Request has been submitted by the customer and automatically assigned to a particular Workcenter based on the category of problem selected.
2. A Problem Request has been automatically generated by IT Request Tracking Tool as the result of a Trouble event from TEC.
Description
The ITSC has reassigned a request for resolution to a Tier II or III Workcenter.
The Resolution process includes the following actions:
1. Select a request from the request queue and review the request history.
2. Analyze the problem which may involve search the knowledge base, or searching solutions database for a similar trouble request offering a possible solution or may involve use of the Trouble Ticket Control feature.
3. Develop a test plan with expected results.
4. Execute the test plan(s).
5. Evaluate the actual results against the expected results. Ensure solution has not affected any other areas.
6. Upon customer approval, implement the solution.
Outputs
Resolved problem request
Exit Criteria
Problem has been resolved to the satisfaction of the customer and meets all technical requirements for implementation, or
Problem could not be resolved by the analyst and is reassigned or escalated to another Workcenter.


Federal Laws
DOD 5000.2-R
DoDD 5000.1
DoD IT Security Certification and Accreditations Process (DITSCAP)
DoD Data Dictionary
Air Force Instructions (AFI)
Air Force Systems Security Instructions (AFSSI)
Air Force Manuals (AFMAN)
Air Force Directives (AFDIR)
Air Force Computer Emergency Response Team (AFCERT)
Air Force Technical Reference Manual (Joint Technical Architecture (JTA-AF)
Air Force Material Command (AFMC) Instructions, Policy, Directives
Air Force Material Command Strategic Plan
Air Force Material Command (AFMC) Network Operations Security Center (NOSC)
Air Force Material Command Mission Performance Indicators (MPIs)
Air Force Flight Test Center Instructions, Policy, Directives, Host Tenant Agreements
Air Force Flight Test Center Strategic Plan
AFFTC Information Technology Directorate Instructions, Policy, Directives
Service Level Agreements, Operational Level Agreements
Memorandums of Agreement/Understanding
Contracts (JT3, SE/TA)
Other References:
DSMC Risk Management Guide (Feb 2001)
Capability Maturity Model Integration (CMMI)
IEEE Standards
Security Threats, Incidents, TCNOs, NOTAMs
AFCERT Requirement, Information
C&A Package
AFFTC CIO Council, Corporate Board Decision
New Requirement/Request (ITR)
Problem (ITR, Remedy Ticket)
Emerging Technology Information
DoD, AF, AFMC, AFFTC Task or Request
BuyIT Request
AFFTC/IT
A0
Services
Internet
Intranet (Centernet, Shared Drives, etc.)
Phone (Basic, Voice Mail, etc.)
Land Mobile Radio
Commercial Radio
DSL
Radars
Products
Networked Applications
Standalone Applications
Reports
Opinions, Recommendations, Assessments
Plans, Policy, Processes, Procedures, Standards
Guidelines
Rough Order of Magnitude Estimates (ROMs)
Cost and Resource Estimates (C&RE)
Metrics
User Access
PRIME (LiveLink)
Remedy, HP Openview, Cisco Works, Tivoli Framework
Telecommunications Management System (TMS)
Core Automated Maintenance System (CAMS)
Communication Systems Installation Records (CSIR)
AFFTC CIO Council
STEM-B, STEM-C
ABSS, JOCAS, Argus, EBS, etc.
MS Office, MS Project, Visio
Security Tools
CASEwise Corporate Modeler, Framework
Concerto
Antivirus Software
Unit Control Centers, Unit COMPUSEC Managers (UCMs)
NIPRNET, SIPRNET, DISA Circuits, Commercial Circuits
Defense Messaging System (DMS)
Risk Radar
DISA Form 41
Resources (Financial, Human, etc.)
NODE:
TITLE:
AFFTC/IT CONTEXT DIAGRAM
NO.: 0


New Requirement/Request (ITR)
Problem (ITR, Remedy Ticket)
Customer Support Division
A1
Security Threats, Incidents, TCNOs, NOTAMs
AFCERT Requirement, Information
C&A Package
AFFTC CIO Council, Corporate Board Decision
Emerging Technology Information
DoD, AF, AFMC, AFFTC Task or Request
Plans
Planning Division
A5
Plans, Policies, Processes
Procedures, Standards
Reports
Opinions, Recommendations
Assessments
Metrics
Guidelines
Consults
Projects
Problems
Projects
Consults
New Requirements
Develop and Deploy Division
A2
Products
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Standalone Applications
Rough Order of Magnitude Estimates (ROMs)
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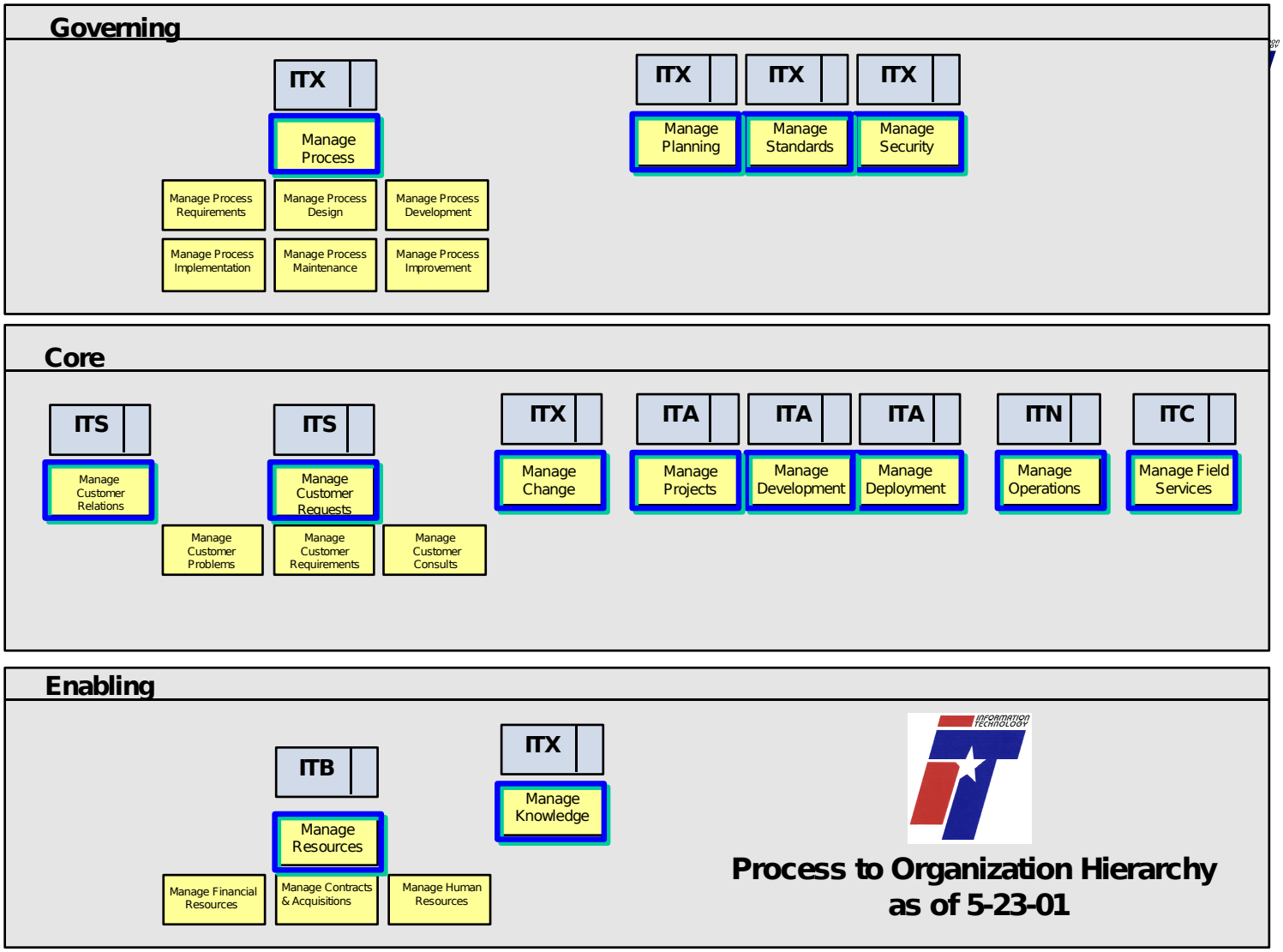
Resource Commitments
Budgets
Training
Contract Support
Deployed Products & Services
Services
Internet
Intranet (Centernet)
Phone (Basic, Voice Mail, etc.)
Land Mobile Radio
Commercial Radio
DSL
Radars
User Access
Operations Division
A3
BuyIT Request
Business Division
A6
Problems
Problems
Operational Systems
Field Services Division
A4
PMIs
NODE:
TITLE:
IT LEVEL 1 DIAGRAM
NO.: 1


Governing
ITX
Manage Process
Manage Process Requirements
Manage Process Design
Manage Process Development
Manage Process Implementation
Manage Process Maintenance
Manage Process Improvement
ITX
Manage Planning
ITX
Manage Standards
ITX
Manage Security
Core
ITS
Manage Customer Relations
ITS
Manage Customer Requests
Manage Customer Problems
Manage Customer Requirements
Manage Customer Consults
ITX
Manage Change
ITA
Manage Projects
ITA
Manage Development
ITA
Manage Deployment
ITN
Manage Operations
ITC
Manage Field Services
Enabling
ITB
Manage Resources
Manage Financial Resources
Manage Contracts & Acquisitions
Manage Human Resources
ITX
Manage Knowledge
Process to Organization Hierarchy
as of 5-23-01